# Data Papers

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## AVIAN BODY SIZES IN RELATION TO FECUNDITY, MATING SYSTEM, DISPLAY BEHAVIOR, AND RESOURCE SHARING

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TERJE LISLEVAND,[1,4] JORDI FIGUEROLA,[2] AND TAMÁS SZÉKELY[3]

[1]*Department of Biology, University of Bergen, Raleigh, Box 7800, N-5020, Bergen, Norway*
[2]*Department of Applied Biology, Estación Biológica de Doñana, CSIC, Avda. María Luisa s/n. E-41013 Sevilla, Spain*
[3]*Department of Biology and Biochemistry, University of Bath, Bath BA2 7AY United Kingdom*

*Abstract.* Body size is an important characteristic of animals, influencing physiology, life histories, and general ecology. Hence, it often needs to be taken into account even if the aim is to test for relationships among other traits. We provide a comprehensive data set on avian body sizes that would be useful for future comparative studies of avian biology. We extracted species-specific measurements on male and female body mass, wing length, tarsus length, bill length, and tail length from major ornithological text books and some other sources covering bird species of Africa, Australia, New Zealand, Antarctica, North America, and the western Palearctic. These measurements were matched with measures of egg and clutch sizes, and scores of mating system, sexual display agility, and the degree of intersexual resource division. We present morphometric data ranging from 2350 species (minimum, tail length) to 2979 species (maximum, wing length) where measurements for both sexes are known, some additional data where only one sex or unsexed birds have been measured, and explanatory data ranging from 1218 species (minimum, display agility) to 2603 species (maximum, egg mass). In total, 3769 species from 125 of 146 different bird families are included. We have used the data in comparative studies of avian sexual size dimorphism, where we test adaptive hypotheses concerning the influence of sexual selection, fecundity, and the degree of within-pair resource sharing. By publishing the data we intend to give easy access to a large data set containing variables relevant for a wide range of comparative studies on birds, thus saving researchers from the time- and resource-consuming data gathering process. In addition, the data set will function to point out species where baseline data on body size and relevant information on reproduction and behavior are currently lacking or of poor quality, thus stimulating the publication of such data.

*Key words:* *allometry; birds; body size; clutch size; egg size; mating systems; niche separation; sexual display; sexual selection; sexual size dimorphism.*

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[4] Present address: Museum of Natural History, University of Bergen, Muséplass 3, N-5020 Bergen, Norway.
E-mail: terje.lislevand@bio.uib.no